

## CLAIMS

- 1 *sub* 1. A computer-based method for identifying common accounts, the method  
2 comprising:  
3 assigning a first user identifier to a first account, the first account being  
4 associated with a first node;  
5 assigning a second user identifier to a second account, the second account  
6 being associated with a second node;  
7 receiving a request from the second node that includes the first user identifier,  
8 when the first account is not already associated to the second node,  
9 determining whether the first and second accounts represent the same  
10 account; and  
11 when it is determined that the first and second accounts represent the  
12 same account, combining the first and second accounts into a single account.
- 1 2. The method of claim 1 wherein the determining includes requesting a  
2 user to indicate whether the first and second accounts represent the same account.
- 1 3. The method of claim 2 including identifying the second account to the  
2 user by specifying a user name associated with the second account.
- 1 4. The method of claim 2 wherein when the user indicates that the first and  
2 second accounts represent the same account, requesting that the user provide credentials  
3 associated with the second account.
- 1 5. The method of claim 1 wherein each account has a user and the user of  
2 the first account is the same as the user of the second account.

1           6.     The method of claim 1 wherein each account has a user and the user of  
2     the first account is not the same as the user of the second account.

1           7.     A method of claim 1 wherein the combining includes deleting one of the  
2     accounts and assigning the user identifier assigned to the deleted account to the remaining  
3     account.

1           8.     The method of claim 7 including associating with the remaining account  
2     a resource that was associated with the deleted account.

1           9.     The method of claim 1 including:  
2             when it is determined that the first and second accounts do not represent the  
3     same account, associating the first account with the second node.

1           10.    A computer-based method of generating a common account, one  
2     account being associated with a node, the method comprising:  
3             receiving at the node information relating to an account; and  
4             when the account to which the information is related is not currently associated  
5     with the node,  
6             determining whether the account associated with the node and the node  
7     not currently associated with the node should be common accounts; and  
8             when it is determined that the accounts should be common accounts,  
9     directing the combining the accounts into a single account.

1           11.    The method of claim 10 wherein the determining includes requesting a  
2     user to indicate whether the accounts are common accounts.

1           12.    The method of claim 11 wherein the determining includes identifying  
2     the account associated with the node to the user by specifying a user name associated with  
3     that account.

1 13. The method of claim 10 wherein each account is associated with one or  
2 more user identifiers.

1 14. The method of claim 13 wherein the information relating to the account  
2 is a user identifier associated with the account.

1 15. The method of claim 10 including determining that the account to which  
2 the information is related is not currently associated with the node by receiving an indication  
3 of that account from another computer.

1 16. A method in a computer system for identifying common accounts, the  
2 method comprising:

3 receiving a user identifier from a user;

4 sending a log on request to a server computer, the request including the  
5 received user identifier, but not including an account identifier;

6 receiving a log on response from the server, the response including an account  
7 identifier associated with the received user identifier; and

8 when the received account identifier does not match an account identifier  
9 previously stored at the node, prompting the user to indicate whether the account identified  
10 by the received account identifier should be the same account as an account identified by an  
11 account identifier previously stored at the node.

1 17. The method of claim 16 including when the user indicates that the  
2 accounts should be common accounts, sending a log on request to the server computer, the  
3 request including the received user identifier and an account identifier previously stored at  
4 the node.

1 18. The method of claim 16 wherein the prompting occurs only if at least  
2 one account identifier was previously stored at the node.

1 19. A method in a computer system for authorizing access to applications,  
2 each application having an application identifier, the method comprising:  
3 receiving a plurality of user identifier and application identifier pairs;  
4 for each pair received, storing the user identifier in association with the  
5 application identifier;  
6 receiving a request to access an application, the request including a user  
7 identifier and application identifier pair, the application identifier identifying the application  
8 to be accessed; and  
9 when the user identifier and application identifier pair of the request match a  
10 stored user identifier and application identifier pair, indicating that access to the application  
11 is authorized.

1 20. The method of claim 19 wherein the requested access is execution of the  
2 application.

1 21. The method of claim 19 wherein the plurality of user identifier and  
2 application identifier pairs are received in requests to access the application identified by the  
3 application identifier of the pair.

1 22. The method of claim 19 including when the user identifier and  
2 application identifier pair of the request does not match a stored user identifier and  
3 application identifier pair, indicating that access to the application is not authorized.

1 23. The method of claim 19 wherein access is authorized for applications  
2 developed by different application developers.

1 24. The method of claim 19 wherein the request is received and the  
2 authorization is indicated before starting execution of the requested application.

1 25. The method of claim 19 wherein received requests are sent by a  
2 plurality of client computers.

1           26. The method of claim 19 wherein each application identifier and user  
2 identifier pair includes a password and indicating that access to the application is authorized  
3 only when the request includes a password that matches the password for the application  
4 identifier and user identifier pair of the plurality of application identifier and user identifier  
5 pairs.

1           27. A method in a computer system for authorizing access to different  
2 applications, each application having an application identifier, the method comprising:  
3           receiving a plurality of user identifier and application identifier pairs; and  
4           for each pair received,  
5                 sending the received user identifier and application identifier pair to an  
6 authorization system;  
7                 receiving from the authorization system an indication whether access to  
8 the application identified by the application identifier is authorized.

1           28. The method of claim 27 wherein the authorization system maintains  
2 user identifier and application identifier pairs that indicate the user identified by the user  
3 identifier is authorized to access the application identified by the application identifier.

1           29. The method of claim 27 wherein the receiving includes receiving a  
2 password that is sent to the authorization system wherein authorization is indicated only  
3 when the sent password matches a password stored at the authorization system for the sent  
4 user identifier and application identifier pair.

1           30. A method in a computer system for authorizing access to a resource,  
2 each resource having a resource identifier, the method comprising:  
3           providing a plurality of user identifier and resource identifier pairs, each user  
4 identifier and resource identifier pair indicating that the identified user is authorized to  
5 access the identified resource;

6 receiving a request to access a resource, the request including a user identifier  
7 and resource identifier pair, the resource identifier identifying the resource to be accessed;  
8 and

9 when the user identifier and resource identifier pair of the received request  
10 match a provided user identifier and resource identifier pair, indicating that access to the  
11 resource is authorized.

1 31. The method of claim 30 wherein the resource is computer data.

1 32. The method of claim 30 wherein the resource is a communications  
2 channel.

1 33. The method of claim 30 wherein the indicating that access to the  
2 resource is authorized occurs after performing authentication for the identified user.

1 34. The method of claim 33 wherein the authentication includes comparing  
2 a received password with a password associated with the matched user identifier and  
3 resource identifier pair.

1 35. A method in a computer system for managing accounts, the method  
2 comprising:

3 assigning an account to a node;

4 receiving from the node a request to access a computer resource that is  
5 associated with an account that is not assigned to the node; and

6 in response to receiving the request, assigning the account associated with the  
7 computer resource to the node so that the computer resource can be accessed from the node.

1 36. The method of claim 35 wherein the computer resource is an  
2 application.

1 37. The method of claim 35 including after access to the computer resource  
2 is complete, un-assigning the account associated with the computer resource from the node.

1 38. The method of claim 35 wherein the accounts associated with the node  
2 represent accounts of different users.

1 39. The method of claim 35 wherein the nodes are computers.

1 40. The method of claim 35 wherein the computer resource is computer  
2 data.

1 41. The method of claim 35 wherein the computer resource is a user.

1 42. The method of claim 35 wherein the computer resource is a  
2 communications channel.

43. A method in a computer system accessing a computer resource, the  
1 method comprising:  
3 assigning a different account to each of a plurality of nodes;  
4 receiving from a node a notification that a user has requested to access a  
5 computer resource that is associated with an account that is assigned to another node; and  
6 in response to receiving the notification, temporarily assigning the account  
7 associated with the computer resource to the node so that the user can access the computer  
8 resource from the node.

1 44. The method of claim 43 wherein after access to the computer resource is  
2 complete, all information relating to the temporarily assigned account is removed from the  
3 node.

1 45. The method of claim 43 wherein after access to the computer resource is  
2 complete, un-assigning the account from the node.

1           46. A method in a computer system for tracking use of applications, the  
2 method comprising:

3           receiving from a client computer a request to access an application, the  
4 requests including an application identifier and user identifier;

5           determining whether the user identifier is associated with an account;

6           when the user identifier is associated with an account,

7           sending to an authorization computer a request to authorize access to the  
8 application, the request including the user identifier; and

9           upon receiving a response indicating that access is authorized, sending  
10 to the client computer a response indicating that access is authorized.

1           47. The method of claim 46 wherein the request received from the client  
2 computer includes a password that is sent to the authorization system.

1           48. The method of claim 46 including sending the application identifier to  
2 the authorization system.

1           49. A method in a computer system for managing account, the method  
2 comprising:

3           receiving a plurality of user identifiers;

4           associating the user identifiers with a single account;

5           receiving attributes when a user is logged on with one of the user identifiers  
6 associated with the single account; and

7           providing those received attributes when a user is logged on with another of the  
8 user identifiers associated with the single account.

1           50. The method of claim 49 wherein the attributes includes preferences  
2 relating to access to an application.

1           51. The method of claim 51 whereby the attributes are associated with the  
2 single account rather than an single user identifier.



1           52. A computer-readable medium containing instructions for causing a  
2 computer system to generate common account, one account being associated with a node, by  
3 a method comprising:

4           receiving at the node information relating to an account; and  
5           when the account to which the information is related is not currently associated  
6 with the node,

7           determining whether the account associated with the node and the node  
8 not currently associated with the node should be common accounts; and

9           when it is determined that the accounts should be common accounts,  
10 directing the combining the accounts into a single account.

1           53. The computer-readable medium of claim 52 wherein the determining  
2 includes requesting a user to indicate whether the accounts are common accounts.

1           54. The computer-readable medium of claim 53 wherein the determining  
2 includes identifying the account associated with the node to the user by specifying a user  
3 name associated with that account.

1           55. The computer-readable medium of claim 52 wherein each account is  
2 associated with one or more user identifiers.

1           56. The computer-readable medium of claim 55 wherein the information  
2 relating to the account is a user identifier associated with the account.

1           57. The computer-readable medium of claim 52 including determining that  
2 the account to which the information is related is not currently associated with the node by  
3 receiving an indication of that account from another computer.

1           58. A computer system for generating a common account, one account  
2 being associated with a node, comprising:

3           means for receiving at the node information relating to an account; and

4 means for, when the account to which the information is related is not currently  
5 associated with the node, determining whether the account associated with the node and the  
6 node not currently associated with the node should be common accounts; and when it is  
7 determined that the accounts should be common accounts, directing the combining the  
8 accounts into a single account.

1 59. The computer system of claim 58 wherein the means for determining  
2 includes requesting a user to indicate whether the accounts are common accounts.

1 60. The computer system of claim 59 wherein the means for determining  
2 includes means for identifying the account associated with the node to the user by specifying  
3 a user name associated with that account.

1 61. The computer system of claim 58 wherein each account is associated  
2 with one or more user identifiers.

1 62. The computer system medium of claim 61 wherein the information  
2 relating to the account is a user identifier associated with the account.

1 63. The computer system medium of claim 58 including means for  
2 determining that the account to which the information is related is not currently associated  
3 with the node by receiving an indication of that account from another computer.

1 64. A computer-readable medium containing instructions for controlling a  
2 computer system to authorize access to different applications, each application having an  
3 application identifier, by a method comprising:

4 receiving a plurality of user identifier and application identifier pairs; and  
5 for each pair received,

6 sending the received user identifier and application identifier pair to an  
7 authorization system;

8 receiving from the authorization system an indication whether access to  
9 the application identified by the application identifier is authorized.

1           65. The computer-readable medium of claim 64 wherein the authorization  
2 system maintains user identifier and application identifier pairs that indicate the user  
3 identified by the user identifier is authorized to access the application identified by the  
4 application identifier.

1           66. The computer-readable medium of claim 64 wherein the receiving  
2 includes receiving a password that is sent to the authorization system wherein authorization  
3 is indicated only when the sent password matches a password stored at the authorization  
4 system for the sent user identifier and application identifier pair.

1           67. A computer-readable medium for controlling a computer system to  
2 authorize access to a resource, each resource having a resource identifier, by a method  
3 comprising:

4           providing a plurality of user identifier and resource identifier pairs, each user  
5 identifier and resource identifier pair indicating that the identified user is authorized to  
6 access the identified resource;

7           receiving a request to access a resource, the request including a user identifier  
8 and resource identifier pair, the resource identifier identifying the resource to be accessed;  
9 and

10           when the user identifier and resource identifier pair of the received request  
11 match a provided user identifier and resource identifier pair, indicating that access to the  
12 resource is authorized.

1           68. The computer-readable medium of claim 67 wherein the resource is  
2 computer data.

1           69. The computer-readable medium of claim 67 wherein the resource is a  
2 communications channel.

1           70. The computer-readable medium of claim 67 wherein the indicating that  
2 access to the resource is authorized occurs after performing authentication for the identified  
3 user.

1           71. The computer-readable medium of claim 67 wherein the authentication  
2 includes comparing a received password with a password associated with the matched user  
3 identifier and resource identifier pair.

1           72. A method in a client computer for coordinating registration of a user  
2 with a server computer, comprising:  
3           receiving a user identifier and an indication that the user is a new user;  
4           when the client computer has previously cached that user identifier,  
5                 prompting the user to indicate whether the user is the same as the user  
6 associated with the previously cached user identifier;  
7                 when the user indicates that the user is not the same, allowing the user  
8 to enter a new user identifier; and  
9                 when the user indicates that the user is the same user, coordinating log  
10 on of the user; and  
11           when the client computer has not previously cached that user identifier,  
12                 registering the user;  
13                 when the registration is successful, caching the user identifier and  
14 coordinating log on of the user.

1           73. A method in a client computer for log on of a user, comprising:  
2           receiving a user identifier and password;  
3           sending a log on request to a server computer, the request including an account  
4 identifier when the client computer has an account identifier associated with the received  
5 user identifier;  
6           when a response indicating that the log on was successful is received, the  
7 response including an account identifier,

8                   when the account identifier does not match an account identifier  
9 previously cached at the client computer, prompting the user whether the received account  
10 identifier and a previously cached account identifier represent the same account; and  
11                   when the user indicates that the accounts represent the same account,  
12 combining the accounts.